

previous claims 1 and 6 with amended claims 1 and 6 as shown in the document entitled "CLEAN VERSION OF THE CLAIMS."

REMARKS

Applicant respectfully requests entry of this Supplemental Amendment, and reconsideration of the Office Action dated January 30, 2001 (Paper No. 17). Upon entry of this Amendment, claims 1-4 and 6-15 will remain pending in this application. No new matter is incorporated by this Amendment.

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Claims 1-15 are rejected under 35 USC § 112, first paragraph, as allegedly containing new matter. Applicant submits that claim 1 has been amended deleting the questioned language. Therefore, reconsideration and withdrawal are respectfully requested.

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Claims 1-15 are rejected under 35 USC § 112, second paragraph, as being indefinite. Applicant submits that claim 1 has been amended deleting the questioned language. Therefore, reconsideration and withdrawal are respectfully requested.

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Claims 1-6 and 9-15 are rejected under 35 U.S.C. 103(a) as obvious based on the Zisman Patent. (U.S. Pat. No. 3,957,672). In addition to the arguments presented in the previous response dated May 30, 2001, Applicant additionally asserts the following.

Zisman addresses a problem which is completely different from the present invention.

Zisman mentions in the background part of its patent (col. 1 lines 7-10) that it relates to a method for displacing liquid films from solid surfaces, liquid being intended as an organic liquid or water. Zisman also contends that the set of technical features disclosed as solving the problem is "capable of displacing liquid organic films and water form solid surfaces" (col. 1 lines 48 and 56-57). However this mention of water is never evidenced in the patent, nor disclosed in any way other than the vague allusion mentioned in the background and the summary parts of the patent. In fact, the only problem addressed by this patent is the removal of an organic liquid from a solid surface, as we are going to demonstrate here-after.

In the background part of col. 1, Zisman discusses the two possible prior art procedures employed for removing oily films from solid surfaces (as mentioned four times in lines 12, 15, 22 and 38-39). It is only when an aqueous emulsion film-removing procedure is used, as know in the prior art, that the displacement of the oily film is followed by washing of the solid surface with water, to remove residues of the oily film and of the applied aqueous emulsion, and that, then, but optionally, the water-washing step is followed by spraying of a water-displacing composition to remove water from the washed surface (col. 1 22-34). However this type of procedure is presented as clearly having to be avoided because of the disadvantage of introducing water, in such a way that the problem of removing water from the washed surface is not in fact a problem addressed by the patent.

The Summary of the invention teaches that a further object of the invention is to provide a displacing organic liquid composition (col. 1 lines 62-63) and indeed that is what all this patent is about. In the detailed description, it is taught that the new compositions of the patent are applied to the solid surfaces "from which the liquid organic film is to be displaced" (col. 2 line 6). The

term "liquid organic film" is indeed cited 6 times in column 2 : lines 5-6, line 11, line 24, lines 30-31, line 51', lines 62-63. When Zisman teaches in column 2 line 65 that "the method of the invention is effective to displace any liquid film from solid surfaces, for example...; in the list of liquid which follows, only organic products are disclosed, water is not. In fact, every time the description mentions the objective of the displacement of a liquid, it is an organic film which is meant (cf col. 4 lines 56-57 ; col. 5 lines 55 and 64 ; col. 6 line 67).

Finally, the only experimental evidence brought by the patent on the effectiveness of the disclosed compositions to displace liquid film deal with hexadecane and propylene carbonate (cf col. 5 line 25 and 38-39) which are 2 specific organic products. an other example also mentions a film of an organic liquid (col. 6 lines 2, 29, 32).

Therefore, Zisman addresses the problem of removing an organic liquid from a solid surface, contrary to the problem solved by our invention which consists in removing water (see our text page 1 line 4) therefrom. In order to solve its problem, Zisman teaches surface active composition containing a specific fluorinated polyethre and possibly various other compounds (cf column 1 lines 50-55) among which fluoroalcohols are cited. This composition is clearly different from Applicant's composition and does not suggest it. As a specific fluorinated polyether, Zisman teaches a product from Dupont referred to as OPFP-n (Oxyperfluoropropylenes). Zisman teaches 3 different embodiments of this composition depending on whether OPFP-n is used as a solute, as a co-solvent (cf col. 2 lines 22-23). So, it is not clear which of OPFP-n or the other compounds is supposed to bring to the composition its surface active properties.

Applicant respectfully submit therefore that the assertion in the Office Action, that the "fluorinated polyether provides the surface activity to the composition" is not properly based, as

not disclosed in Zisman. Surface-active properties are normally brought by a surfactant, namely a compound which possesses a hydrophilic moiety (like an OH or an ionic group) and a hydrophobic moiety (like a hydrocarbon or fluorocarbon chain). Apparently, this is not the case for OPFP-n, given its formula. It is only in the second embodiment wherein OPFP-n is used as a solvent, that the solute may be (of col. 2 lines 53-55) a compound belonging to one of the 4 following chemical classes:

- a fluoroalcohol, or
- a fluromonocarboxylic acid, or
- a partially fluorinated diester, or
- a fluorinated hydrocarbon.

Further, only some of the general formulae falling under the first chemical class and given in column 3 are vaguely similar to our compound of formula (I).

One who is looking for the problem outlined in our patent of finding a substitute for CFC-113, suitable for removing water from solid surfaces, based on a fluorinated hydrocarbon in which ionic-surface active agent are soluble, has no reason to address Zisman which teaches a composition to remove an organic liquid. On the contrary, Zisman teaches (besides a vague and ill-defined teaching) practical compositions among which several are CFC-113 based (cf column 5 examples 1 and 2, table I, and column 6 examples 8, 9, 10), and therefore at the opposite of the objective of Applicant's instant invention. One skilled in the art, even addressing the teaching of Zisman, is not directed towards the composition claimed by the applicant. The analysis in the Office Action, thus appears to be based on hindsight, given the possible number of combinations

between the 4 chemical classes and the sub-groups for the fluoroalcohol class. In particular, Zisman does not suggest a composition consisting of 3 different compounds:

- the surface-active agent
- the fluorinated solvent
- the polyfluorinated alcohol of formula (I)

On the contrary Zisman teaches away from our composition since the only compound he considers as compulsory in his composition is a very specific compound (OPFP-n) which is lacking from our composition.

Therefore, reconsideration and withdrawal are respectfully requested.

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Claims 1-3 and 7-12 are rejected under 35 U.S.C. 103(a) as obvious based on Zisman combined with the Bil patent (U.S. Pat. No. 5,514,301). In addition to the arguments presented in the previous response dated May 30, 2001, Applicant additionally asserts the following.

Bil describes a dewetting composition consisting of a solution of surface-active material in at least one halogenated aliphatic solvent of a precise type in column 2. No polyfluorinated alcohol corresponding to our general formula (I) is disclosed, so that the combination with Zisman does not remedy the deficiency of this reference. On the contrary, Bil contemplates as solvent for the disclosed composition :

- CFCs like 113 (cf col. 2 lines 40-42 and examples 1 and 2), or
- HCFCs like 141b (cf col. 2 lines 47-52 and examples 4 to 6);

which are exactly the solvents that the present invention wants to avoid (see our text page 1 line 21).

Therefore, reconsideration and withdrawal are respectfully requested.

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Applicant respectfully submits that the above remarks obviate the outstanding rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees are due in connection with the filing of this Amendment, such as fees under 37 C.F.R. §§ 1.16 or 1.17, please charge the fees to our Deposit Account No. 02-4300; Order No. 033808.009. If an extension of time under 37 C.F.R. § 1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The extension fee also should be charged to Deposit Account No. 02-4300; Order No. 033808.009.

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, LLP

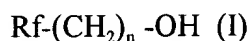
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MARKED-UP COPY OF THE PREVIOUS CLAIMS

1. (Four Times Amended) A dewetting composition, consisting essentially of a solution of at least one surface-active agent in a mixture of at least one fluorinated solvent and of at least one water-immiscible polyfluorinated alcohol of formula:



in which n is equal to 1 or 2 and Rf represents a linear or branched perfluoroalkyl radical containing from 4 to 8 carbon atoms,

wherein said composition does not exhibit a flash point under standard determination conditions (ASTM standard D 3828) and wherein the fluorinated solvent is a saturated or unsaturated fluorinated hydrocarbon containing from 3 to 6 carbon atoms [has physical characteristics similar to those of CFC 113 and HCFC 141b].

6. (Four Times Amended) The composition according to Claim [5] 4, wherein the fluorinated hydrocarbon is selected from 1,1,1,3,3-pentafluorobutane, 1,1,1,2,2,4,4-heptafluorobutane, 1,1,1,2,3,4,4,5,5,5-decafluoropentane, 1,1,1,2,2,3,3,4,4-nonafluorohexane, 1H-perfluorohexane, n-perfluorohexane, (perfluorobutyl) ethylene and perfluoro (methylmorpholine).